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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,375	10/23/2001	Scott T. Kohls	30566.192-US-01	8223
22462	7590	11/16/2004	EXAMINER	
			THAI, CUONG T	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/001,375	KOHLS ET AL.	
	Examiner	Art Unit	
	CUONG T THAI	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14, 17-30 and 33-46 is/are rejected.
- 7) Claim(s) 15-16, 31-32, and 47-48 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 October 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

PART III DETAILED ACTION

1. Claims 1-48 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement filed Feb/07/2002 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office Action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-14, 17-30, and 33-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Zuffante et al. (USPN: 6,219,049 B1) hereinafter Zuffante.

As per claims 1 (method), 17 (system), and 33 (readable medium); Zuffante discloses a method for positioning a graphical component in a computer implemented drawing program as the technique of when the mouse was clicked while the cursor was in the graphical browser portion (see col. 14, lines 18-20), comprising:

Selecting a graphical component displayed on a display device is taught by Zuffante as the technique of if the mouse clicking event occurred while the mouse cursor was in the graphical browser portion of the window (see col. 14, lines 16-18);

Inferring a first feature of the selected graphical component is taught by Zuffante as the technique of step 264 to determine if the mouse clicking event is in conjunction with a drag (see col. 14, lines 21-22);

Analyzing underlying geometry to determine one or more second features of the underlying geometry that can mate with the first feature is taught by Zuffante as the technique of determining a characteristic geometry of the feature, dynamically previewing the mating of the feature to a component of the model (see abstract) and step 264 to determine if the mouse clicking event is in conjunction with a drag and drop operation (see col. 14, lines 21-22);

Displaying feedback that indicates placement potential for the selected graphical component based on the first feature mating with one of the second features is taught by Zuffanta as the technique of system snaps component into position. Cursor dynamically changes to indicate set of mates to be created if the user drops the component (see block 424 in Fig. 32).

These claims are therefore rejected for the reasons as set forth above.

As per claims 2 (method), 18 (system), and 34 (readable medium); the limitation of displaying an indication of the selected first feature is taught by Zuffante as the technique of the icon that is coincident with the cursor of the mouse is highlighted as is

the portion of the model in the modeling portion of the window corresponding to the feature associated with the icon (see col. 16, lines 55-58). These claims are therefore rejected for the reasons as set forth above.

As per claim 3 (method), 19 (system), and 35 (readable medium); the limitation of the first feature is inferred based on a location of a cursor when the graphical component was selected is taught by Zuffante as the technique of determining if the mouse clicking event occurred while the mouse cursor was in the graphical browser portion of the window or the modeling portion of the window. If the mouse clicking event is in conjunction with a drag and drop operation. (see col. 14, lines 16-22). These claims are therefore rejected for the reasons as set forth above.

As per claim 4 (method), 20 (system), and 36 (readable medium); the limitation of wherein a key is held down during the selection of the graphical component is taught by Zuffante as the technique of the user places the mouse cursor over the icon of the feature to be moved, clicks and holds down the left button of the mouse 34 (see col. 6, lines 38-40). These claims are therefore rejected for the reasons as set forth above.

As per claims 5 (method), 21 (system), and 37 (readable medium); the limitation of wherein underlying geometry is analyzed as the selected graphical component is moved in accordance with a movement of a cursor is taught by Zuffante as the technique of the characteristic geometry may include a number of geometric features,

such as a cylindrical face, circular edge, and planar face for a bolt. As the system determines the characteristic geometry, the user may drag the component in the modeling portion 42 of the window 40 (see col. 21, lines 60-64). These claims are therefore rejected for the reasons as set forth above.

As per claims 6 (method), 22 (system), and 38 (readable medium); the limitation of displaying feedback comprises displaying a preview of the selected graphical component in a placement position is taught by Zuffante as the technique of system shows dynamic preview of component being positioned, with characteristic geometry highlighted (see block 464 in Fig. 33). These claims are therefore rejected for the reasons as set forth above.

As per claims 7 (method), 23 (system), and 39 (readable medium); the limitation of the feedback comprises a set of visual positioning characters is taught by Zuffante as the technique of under Visual tree control, there are array of Popup Menus, array of Function Pointers, and array of Graphical Icons (see Fig. 21). These claims are therefore rejected for the reasons as set forth above.

As per claims 8 (method), 24 (system), and 40 (readable medium); the limitation of where the feedback indicates a type of constraint that will be applied is taught by Zuffante as the technique of as the component is moved near other components, the

system automatically determines what set of mates, or geometric constraints (see col. 19, lines 11-14). These claims are therefore rejected for the reasons as set forth above.

As per claims 9 (method), 25 (system), and 42 (readable medium); the limitation of wherein the type of constraint may be changed by a user is taught by Zuffante as the technique of allowing the user to alternate between different mating scenarios (see col. 3, lines 5-6). These claims are therefore rejected for the reasons as set forth above.

As per claims 10 (method), 26 (system), and 41 (readable medium); the limitation of wherein the one or more second features are limited to the type of constraint is taught by Zuffante as the technique of the section 69 of the feature list 68 in Fig. 4A is modified to provide the section 69 of the feature list 68 in Fig. 4B using a technique called “drag and drop”. Drag and drop is a conventional technique that invokes using the mouse 34 to move an icon associated with a feature to a different location in the feature set. The user places the mouse cursor over the icon of the feature to be moved, clicks and holds down the left button of the mouse 34 while moving the mouse cursor and the feature icon to the desired location and then releases the button of the mouse 34. Alternatively, the user can achieve the same results by employing a similar conventional technique, called “cut and paste”, to highlight one or more icons, execute a “cut” or “copy” operation, select an insertion location, and execute a “paste” operation (see col. 6, lines 33-46). These claims are therefore rejected for the reasons as set forth above.

As per claims 11 (method), 27 (system), and 43 (readable medium); the limitation of wherein the feedback dynamically changes as the selected graphical component is moved over one or more of the second features as the technique of System snap component into position. Cursor dynamically changes to indicate set of mates to be created if the user drops the component (see block 424 in Fig. 32). These claims are therefore rejected for the reasons as set forth above.

As per claims 12 (method), 28 (system), and 44 (readable medium); the limitation of placing the selected graphical component based on the first feature mating with one of the second features is taught by Zuffante as the technique of User **drags component** in the browser window of the assembly (see block 420, Fig. 32) and System **snap** component into position. Cursor dynamically changes to indicate set of mates to be created if the user **drops** the component (see block 424 in Fig. 32). These claims are therefore rejected for the reasons as set forth above.

As per claims 13 (method), 29 (system), and 45 (readable medium); the limitations of wherein the graphical component is selected when a mouse button is depressed and the selected graphical component is placed when the mouse button is released are taught by Zuffante as the technique of the **user places the mouse cursor over the icon of the feature to be moved, clicks and holds down** the left button of the mouse 34 while moving the mouse cursor and the feature icon to the desired

location and then releases the button of the mouse 34 (see col. 6, lines 38-42).

These claims are therefore rejected for the reasons as set forth above.

As per claims 14 (method), 30 (system), and 46 (readable medium); the limitation of wherein: one of the second features that can mate with the first feature is inferred; and one or more alternative second features that can mate with the first feature may be selected using a keyboard are taught by Zufante as the techniques of user **drags component** in the browser window of the assembly (see block 420, Fig. 32) and System **snap** component into position. Cursor dynamically changes to indicate set of mates to be created **when the user drops the component** (see block 424 in Fig. 32), and Tab key pressed function (see block 428 in Fig. 32). These claims are therefore rejected for the reasons as set forth above.

Reasons for Allowance

5. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 31 and 47 are objected for the same reasons applied to claim 15 except for system and readable medium instead of method claim. Claims 16, 32, and 48 are further limits depend on claims 15, 31, and 47, respectively.

6. The following is an Examiner's statement of reasons for allowance:

Examiner carefully considered claim 15 of the present application. None of the cited arts of record including Zuffante et al. (USPN: 6,219,049), Lambert et al. (USPN: 6,614,458), Harding et al. (USPN: 6,441,837), Bhargava et al. (USPN: 6,219,055), Bloomquist et al. (USPN: 6,480,813), nor Arsenault et al. (USPN: 6,512,519) discloses, suggests, nor teaches a method for positioning a graphical component in a computer implemented drawing program comprising one or more second features, wherein each of the one or more second features has a constraint type, potential mates for the first component may be limited to a particular constraint type, and a different constraint type may be selected using a keyboard.

Any comments considered necessary by applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG T THAI whose telephone number is (571) 272-4056. The examiner can normally be reached on 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2173

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CUONG T THAI
Examiner
Art Unit 2173

November 10, 2004



RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173